WO 2005/077303 PCT/US2005/004076

WE CLAIM:

5

10

15

20

25

35

1. A venous filter comprising at least two struts each having a connected end and a non-connected end, wherein each of said struts further comprises a strut portion and an anchor portion, and wherein said strut portion and said anchor portion are attached via an electrolytically active thread; and

a head, wherein said head connects said connected ends of said struts, wherein said strut portion can be separated from said anchor portion at least in part by the application of an electrical current.

- 2. The venous filter of claim 1, wherein said electrolytically active threads are on said strut portion.
 - 3. The venous filter of claim 1, wherein said electrolytically active threads are on said anchor portion.
- 4. The venous filter of claim 1, wherein said electrolytically active thread comprises platinum, rhodium, palladium, rhenium, tungsten, gold, silver, tantalum, stainless steel, nickel, titanium, copper, zinc, benzillium, silicon, tin, aluminum, gallium, or combinations thereof.
 - 5. A venous filter comprising at least two struts, each having a connected and a non-connected end, wherein each of said struts comprises a temperature sensitive portion and an anchor portion;

a head, wherein said head connects said connected ends of said struts; wherein said anchor portion is separated from said temperature sensitive portion at least in part by changing the temperature around at least said temperature sensitive portion.

- 6. The venous filter of claim 5, wherein said temperature sensitive portion comprises nickel-titanium alloys, copper base alloys, or combinations thereof.
 - 7. The venous filter of claim 6, wherein said temperature sensitive portion comprises nitinol.
 - 8. A venous filter comprising a web comprising a dissolvable material; and at least two anchors,

WO 2005/077303 PCT/US2005/004076

wherein said at least two anchors are configured to retain said web within a mammalian blood vessel.

- 9. The venous filter of claim 8, wherein said dissolvable material comprises catgut, treated catgut (mild chromic gut), polyglycolic acid, polyglactic acid, polydioxanone, polyglyconate, polyglecaprone 25, pectin, agar, arabic gum, xanthum gum, tragacanth gum, karaya alginic acid, a salt of karaya alginic acid, carrageenan, dextrin, starches, celluloses, polyvinyl alcohol, polyvinylpyrrolidone, polyethylene glycol, mannans, hydrogels, elastin-like peptides, polyhydroxyalkanoates, a polycondensation polymer of glycerol and sebacic acid, or some combination thereof.
 - 10. The venous filter of claim 9, wherein said dissolvable material comprises hydrogels, elastin-like peptides, polyhydroxyalkanoates, or a polycondensation polymer of glycerol and sebacic acid.

15

25

- 11. The venous filter of claim 10, wherein said dissolvable material is a polycondensation polymer of glycerol and sebacic acid.
- 20 12. The venous filter of claim 9, wherein said dissolvable material comprises one piece of material that is spiraled from the outside in.
 - 13. The venous filter of claim 12, further comprising other pieces of dissolvable material that crosslinks the spiraled piece of dissolvable material.
 - 14. The venous filter of claims 1 or 8, wherein said filter has a shape selected from the group consisting of a web, a spiral, and a conical shape.
- 15. The venous filter of claim 8, wherein said filter dissolves in stages based upon the physical thickness of the web material.
 - 16. the venous filter of claim 8, wherein said filter dissolves in stages based upon the chemical solubility of the web components.
- 35 17. the venous filter of claims 15 and 16, wherein said filter dissolves in stages, said filter dissolution starting at the filter center and concluding at the filter periphery.